

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of
Inventor:

Invention:

Reissue Application Filed:

Original Patent Number:

Atty Docket No.:

Kevin B. Tucek

Hand-Held Laser Light Generator Device

Herewith

6,013,096

206-004

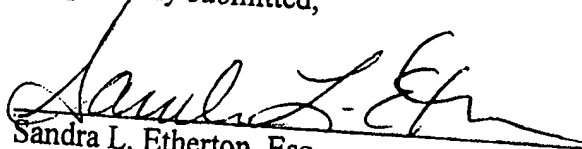
STATEMENT OF STATUS AND SUPPORT REMARKS

Honorable Commissioner of Patents
Washington, D.C. 20231

Dear Sir,

Please find enclosed a reissue application for the above-identified patent. Claims 20-34 are presented in the form specified under 37 CFR 1.173(b), and Applicant requests that the patent be amended to add these claims. Remarks are presented setting forth an explanation of the support in the disclosure of the patent for the added claims.

Respectfully submitted,



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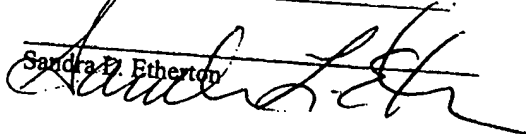
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CERTIFICATE OF EXPRESS MAIL under 37 CFR 1.10

I hereby certify that the correspondence listed above is being deposited with the United States Postal Service as Express Mail, postage paid, in an envelope addressed to: Commissioner of Patents, Washington, D.C. 20231, on
11/06/01

The Express Mail number is: ET462152165 US



Sandra L. Etherton

Marked-Up Copy of Amendments to the Claims

I claim:

1. A hand-held laser light generator device for use in medical therapy, said device comprising:

(a) a wand in the form of a substantially elongated hollow tube defining an interior cavity and capable of being retained in a hand of a user and freely moved relative to the surface of the skin of a patient to receive the medical therapy;

(b) means mounted in said interior cavity of said wand for generating a beam of laser light in the red color spectrum;

(c) an optical arrangement mounted in said interior cavity of said wand for receiving the red color spectrum generated beam of laser light from said generating means and for transforming the generated beam of laser light into a substantially planar beam of laser light disposed externally of said wand for producing a line of laser light in the red color spectrum at a desired location on the surface of the patient's skin and with said line of laser light being visible to the user as said wand is held and freely moved by the user in a spaced relationship from and out of contact with the patient;

(d) a housing defining an interior chamber and having an exterior;

(e) means disposed in said interior chamber of said housing for supplying electrical power to said laser beam generating means;

(f) means for electrically interconnecting said laser beam generating means and said electrical power supplying means such that said wand is movable relative to said housing; and

(g) means on said housing for controlling a period of time said beam of laser light is generated.

Claim Status

No claims in the original patent are amended or cancelled. Claims 20-34 are added.

Remarks

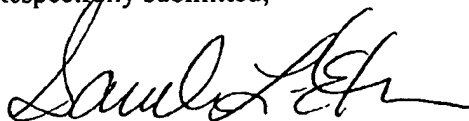
The patented invention is compact in size. See the Title and Column 1, Lines 60-61 of US patent 6,013,096 (hereinafter "the '096 patent"). It is freely movable and easy to maneuver by hand. See Col. 2, Line 63. Preferably a battery is used to supply electrical power to the laser beam generating means. See Col. 2, Line 34. The battery can be any commercially-available d.c. battery. See Col. 5, Line 63.

The specification supports a battery attached to the laser module to power it. See Col. 2, Lines 12-14; Col. 4, Lines 12-17. The specification does not require that the battery reside in an external housing separate from the wand. If a small enough battery is used, or alternatively a large enough wand, the battery can fit inside the wand cavity, making a shorter connection to the laser module and thus a smaller size device. See Col. 4, Lines 20-22. The added claims reflect moving the battery to the wand cavity.

Further, the specification does not indicate that the wand must move relative to a housing to achieve the objectives of the invention. The pertinent object here is to move the wand relative to the patient. See Col. 1, Lines 62-65; Col. 4, Line 48. As originally claimed, the means for supplying electrical power may reside in a housing external to the wand so that, in effect the wand moves relative to the housing when moving relative to the patient. However, the object of freely moving the wand relative to the patient can be achieved without reference to the housing, particularly if the power means is moved within the wand.

Applicant believes that the specification supports the added claims 20-34, and respectfully requests that the '096 patent be amended to add these claims.

Respectfully submitted,



Sandra L. Etherton
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2. The device of claim 1 wherein said generating means is a semiconductor diode laser using less than one watt of power.

3. The device of claim 1 wherein the generated said beam of light has a wavelength of about 635 nm.

4. The device of claim 1 wherein said optical arrangement includes:

a collimating lens; and

a line generating prism, said collimating lens and line generating prism being disposed in a serial relation to said generating means.

5. The device of claim 1 wherein said electrical power supplying means is a battery.

6. The device of claim 1 wherein said controlling means includes:

an electrical timing circuit disposed in said interior chamber of and being mounted to said housing;

a start switch activatable between on and off positions; and

a selector knob having multiple period of time length setting positions, said start switch and selector knob being mounted to said housing and accessible at said exterior thereof and being in operable communication with said electrical timing circuit for controlling initiation of generation of said beam of laser light and length of the period of time said beam of laser light is generated.

7. The device of claim 6 wherein said controlling means further includes:

a lock mechanism mounted to said housing; and

a key for actuating said lock mechanism between a first position in which said lock mechanism permits said start switch to be activated to said on position and a second position in which said lock mechanism prevents said start switch from being activated to said on position.

8. The device of claim 1 wherein said housing further has a cradle mounted to and projecting outwardly from said exterior of said housing for releasably securing said wand thereto, said cradle defining an annular slot open at opposite ends such that said tubular wand can be removably and slidably placed through said slot in a relatively tight-fitting relationship with said cradle and thereby retained by said cradle in a storage position spaced from and alongside said housing.

9. The device of claim 1 wherein said housing further has a clip mounted to said exterior of said housing for releasably securing said housing to an article of clothing worn by the user.

10. A hand-held laser light generator device for use in medical therapy, said device comprising:

(a) a wand in the form of a substantially elongated hollow tube defining an interior cavity and capable of being retained in a hand of a user and freely moved relative to the surface of the skin of a patient to receive the medical therapy;

(b) a semiconductor diode laser mounted in said interior cavity of said wand for generating a beam of laser light in the red color spectrum;

(c) an optical arrangement mounted in said interior cavity of said wand for receiving the red color spectrum generated beam of laser light from said generating means and for transforming the generated beam of laser light into a substantially planar beam of laser light disposed externally of said wand for producing a line of laser light in the red color spectrum at a desired location on the surface of the patient's skin and with said line of laser light being

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(e) a battery disposed in said interior chamber of said housing for supplying electrical power to said laser;

(g) means for controlling a period of time said beam of laser light is generated, said controlling means including

(ii) a start switch activatable between on and off positions,

(iv) means electrically activatable for generating a sound audible to the user, and

(v) means electrically connected to said timing circuit and said sound generating means for electrically charging in response to said beam of laser light being generated and for

electrically discharging and thereby electrically activating said sound generating means in response to termination of generation of said beam of laser light.

11. The device of claim 10 wherein said laser uses less than one watt of power.

12. The device of claim 10 wherein said generated said beam of laser light has a wavelength of about 635 nm.

13. The device of claim 10 wherein said optical arrangement includes;

a collimating lens; and

a line generating prism, said collimating lens and line generating prism being disposed in a serial relation to said laser.

14. The device of claim 10 wherein said controlling means further includes:

a lock mechanism mounted to said housing; and

a key for actuating said lock mechanism between a first position in which said lock mechanism permits said start switch to be activated to said on position and a second position in which said lock mechanism prevents said start switch from being activated to said on position.

15. The device of claim 10 wherein said housing further has a cradle mounted to and projecting outwardly from said exterior of said housing for releasably securing said wand thereto, said cradle defining an annular slot open at opposite ends such that said tubular wand can be removably and slidably placed through said slot in a relatively tight-fitting relationship with said cradle and thereby retained by said cradle in a storage position spaced from and alongside said housing.

16. The device of claim 10 wherein said housing further has a clip mounted to said exterior of said housing for releasably securing said housing to an article of clothing worn by the user.

17. A hand-held laser light generator device for use in medical therapy, said device comprising:

(a) a wand in the form of a substantially elongated hollow tube defining an interior cavity and capable of being retained in a hand of a user and freely moved relative to the surface of the skin of a patient to receive the medical therapy;

(b) a semiconductor diode laser mounted in the interior cavity of said wand and using less than one watt of power for generating a beam of laser light in the red color spectrum and having a wavelength of about 635 nm;

(c) an optical arrangement mounted in said interior cavity of said wand and including

(i) a collimating lens, and

(ii) a line generating prism, said collimating lens and line generating prism being disposed in a serial relation to said laser such that said beam of laser light in said red color spectrum generated by said laser is received and transformed into a substantially planar beam of laser line disposed externally of said wand for producing a line of laser light in the red color spectrum at a desired location on the surface of the patient's skin and with said line of laser light being visible to the user as said wand is held and freely moved by the user in a spaced relationship from and out of contact with the patient;

(d) a housing defining an interior chamber and having an exterior;

(e) a battery disposed in said interior chamber of said housing for supplying electrical power to said laser;



(e) means for electrically interconnecting said laser beam generating means and said electrical power supplying means.

27. The device of claim 26 wherein the electrical power supplying means is a battery.

28. The device of claim 26 further comprising a means on said wand for controlling a period of time said beam of laser light is generated.

29. The device of claim 28 further comprising a means electrically interconnected to said means for controlling a period of time for informing the user that the laser light is no longer being generated.

30. The device of claim 26 wherein said wand further has a clip mounted to said exterior of said wand for releasably securing said wand to an article of clothing worn by the user.

31. A hand-held laser light generator device for use in medical therapy, said device comprising:

(a) a wand in the form of a substantially elongated hollow tube defining an interior cavity and capable of being retained in a hand of a user and freely moved relative to the surface of the skin of a patient to receive the medical therapy;

(b) means mounted in said interior cavity of said wand for generating a beam of laser light in the red color spectrum;

(c) an optical arrangement mounted in said interior cavity of said wand for receiving the red color spectrum generated beam of laser light from said generating means and for transforming the generated beam of laser light into a substantially planar beam of laser light disposed externally of said wand for producing a line of laser light in the red color spectrum at a desired location on the surface of the patient's skin and with said line of laser light being visible to the user as said wand is held and freely moved by the user in a

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to receive the medical therapy; and the means for generating a beam of laser light is mounted in said interior cavity of said wand.

22. The device of claim 20 wherein the electrical power supplying means is a battery.

23. The device of claim 20 further comprising a means on said wand for controlling a period of time said beam of laser light is generated.

24. The device of claim 23 further comprising a means electrically interconnected to said means for controlling a period of time for informing the user that the laser light is no longer being generated.

25. The device of claim 20 wherein said wand further has a clip mounted to said exterior of said wand for releasably securing said wand to an article of clothing worn by the user.

26. A hand-held laser light generator device for use in medical therapy, said device comprising:

(a) a wand in the form of a substantially elongated hollow tube defining an interior cavity;

(b) means mounted in said interior cavity of said wand for generating a beam of laser light;

(c) an optical arrangement mounted in said interior cavity for receiving the generated beam of laser light and for transforming the generated beam of laser light into a line of laser light in the red color spectrum at a desired location on the surface of the patient's skin;

(d) means disposed in said interior cavity for supplying electrical power to said laser beam generating means; and

response to termination of generation of said beam of laser light.

18. The device of claim 17 wherein said housing further has a cradle mounted to and projecting outwardly from said exterior of said housing for releasably securing said wand thereto, said cradle defining an annular slot open at opposite ends such that said tubular wand can be removably and slidably placed through said slot in a relatively tight-fitting relationship with said cradle and thereby retained by said cradle in a storage position spaced from and alongside said housing.

19. The device of claim 17 wherein said housing further has a clip mounted to said exterior of said housing for releasably securing said housing to an article of clothing worn by the user.

20. A hand-held laser light generator device for use in medical therapy, said device comprising:

(a) a wand in the form of a substantially elongated hollow tube;

(b) means attached to said wand for generating a beam of laser light in the red color spectrum;

(c) an optical arrangement attached to said wand for transforming the generated beam of laser light into a line of laser light at a desired location on the surface of the patient's skin;

(d) means for supplying electrical power to said laser beam generating means; and

(e) means for electrically interconnecting said laser beam generating means and said electrical power supplying means.

21. The device of claim 20 wherein the tube defines an interior cavity and is capable of being retained in a hand of a user and freely moved relative to the surface of the skin of a patient

(f) an electrical cord having opposite ends, one of said opposite ends being attached to said wand and making electrical connection with said laser, the other of said opposite ends being attached to said housing and making electrical connection with said battery such that said wand is movable relative to said housing; and

(g) means on said housing for controlling a period of time said beam of laser light is generated, said controlling means including

(i) an electrical timing circuit disposed in said interior chamber of and being mounted to said housing,

(ii) a push button start switch activatable between on and off positions,

(iii) a rotary selector knob having multiple period of time length setting positions, said push button start switch and rotary selector knob being mounted to said housing and accessible at said exterior of said housing and being in operable communication with said electrical timing circuit for controlling initiation of generation of and length of the period of time said beam of laser light is generated,

(iv) a lock mechanism mounted to said housing,

(v) a key for actuating said lock mechanism between a first position in which said lock mechanism permits said push button start switch to be activated to said on position and a second position in which said lock mechanism prevents said push button start switch from being activated to said on position,

(vi) means electrically activatable for generating a sound audible to the user, and

(vii) means electrically connected to said timing circuit and said sound generating means for electrically charging in response to said beam of laser light being generated and for electrically discharging and thereby electrically activating said sound generating means in

spaced relationship from and out of contact with the patient;

(d) a housing defining an interior chamber and having an exterior;

(e) means disposed in said interior chamber of said housing for supplying electrical power to said laser beam generating means;

(f) means for electrically interconnecting said laser beam generating means and said electrical power supplying means; and

(g) means on said housing for controlling a period of time said beam of laser light is generated.

32. The device of claim 31 further comprising a means electrically interconnected to said means for controlling a period of time for informing the user that the laser light is no longer being generated.

33. The device of claim 31 wherein the electrical power supplying means is a battery.

34. The device of claim 31 wherein said wand further has a clip mounted to said exterior of said wand for releasably securing said wand to an article of clothing worn by the user.

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